20070523.ba v04_n054.bam.20070523

>From ???@??? Tue May 22 19:49:21 2007 -0500
Date: Wed, 23 May 2007 00:48:22 GMT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 4054
Message-Id: <20070523004822.D3AFD47014B@srvr1.theporch.com>

BOATANCHORS Digest 4054

Topics covered in this issue include:

    by "Ken" <n5cm@rtconline.com>
 19) AN/PRM-1A Radio Test Set
    by David Hollander <n7rk@cox.net>
 20) Re: Johnson Junior Matchbox.
    by Bob Roehrig <broehrig@aurora.edu>
 21) Re: AN/PRM-1A Radio Test Set
    by "Sandy" <ebjr@i-55.com>

Message-Id: <3.0.6.32.20070521143741.00f34c40@pop3.dccnet.com>
Date: Mon, 21 May 2007 14:37:41 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Ralph Parker <rparker@dccnet.com>
Subject: Re: Heathkit DX-100 Power Supply
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>What's the line voltage at the Variac output?
>The 350 V figure was probably based on either 115 or 117 V...

My proceedure over the years has been to set the input line voltage with a
Variac to produce 6.3v for the filaments (under load). Then I use a bucking
xformer, set to the closest I can get to the above, and let the B+ fall
where it may.
I've convinced myself that this is the best overall for the radio.

VE7XF

Message-ID: <00ae01c79bfb$01ebddc0$640fa8c0@radioroom>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: SWR Bridges
Date: Mon, 21 May 2007 18:54:28 -0400
MIME-Version: 1.0
Content-Type: text/plain;
    format=flowed;
    charset="iso-8859-1";
    reply-type=original
Content-Transfer-Encoding: 7bit

> Freq (MHz) R(ohms) X(+ohms)
> ---------------------------
> 1.7   47   0
> 3.7   47   0
> 7.2   47   3.2
> 14.2   47   3.2
> 21.2   47   4.5

> 28.2   47   2.7
>
> All the reactances are inductive.
>
> If I'm doing my maths & Smith Chart stuff correctly, the
> worst-case SWR, on 15 m,
> is 1.0045:1 (please, a cross-check from someone?).

That's 1.13:1 SWR, not 1.0045.

73 Tom

Message-ID: <00c701c79bfc$3c6b7e50$640fa8c0@radioroom>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Arden Allen" <gumbear@pacbell.net>
Subject: Re: Heath SWR Bridges
Date: Mon, 21 May 2007 19:03:08 -0400
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=original
Content-Transfer-Encoding: 7bit

> Let's get the facts out here, now: the Heath Cantenna is a
> shorted, very
> short transmission line. Hence, it is inductive with an
> impedance of approx
> Zo tan l, where l is the length of the TL in electrical
> degrees. When that
> piece of engineering marvel approaches a 1/4-wave the
> input impedance is
> approx infinite.
>
> So much for wonderful engineering design.

I'm not sure I understand that. It isn't perfect but it certainly isn't anywhere near that bad.

The Heathkit dummy load is a physically large 50 ohm resistor mounted inside a tube that is inside oil inside a can.

The three primary sources of impedance or SWR error are the physical length of the transmission line formed by the 50

ohm resistor and the sleeve around the resistor, the
increasing transmission line impedance error as we move
towards the shorted end of that resistor inside the tube,
and the resistance error in the resistor.

What's the beef???

73 Tom

Message-Id: <6.2.1.2.2.20070521200554.02fc9eb0@pop-server.nc.rr.com>
Date: Mon, 21 May 2007 20:07:25 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: john <johnmb@nc.rr.com>
Subject: Re: Heath SWR Bridges
Cc: Arden Allen <gumbear@pacbell.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I agree... it seems like a perfectly good design given the intended use and
the target cost. Heath sold tens of thousands of them, then MFJ did the same.

It's a HF dummy load... works fine.

John K5MO

At 07:03 PM 5/21/2007, Tom Rauch wrote:
>>Let's get the facts out here, now: the Heath Cantenna is a shorted, very
>>short transmission line. Hence, it is inductive with an impedance of approx
>>Zo tan l, where l is the length of the TL in electrical degrees. When that
>>piece of engineering marvel approaches a 1/4-wave the input impedance is
>>approx infinite.
>>
>>So much for wonderful engineering design.
>
>
>I'm not sure I understand that. It isn't perfect but it certainly isn't
>anywhere near that bad.
>
>The Heathkit dummy load is a physically large 50 ohm resistor mounted
>inside a tube that is inside oil inside a can.
>

>The three primary sources of impedance or SWR error are the physical
>length of the transmission line formed by the 50 ohm resistor and the
>sleeve around the resistor, the increasing transmission line impedance
>error as we move towards the shorted end of that resistor inside the tube,
>and the resistance error in the resistor.
>
>What's the beef???
>
>73 Tom
>
>

Message-ID: <016901c79c0d$01b6e5e0$640fa8c0@radioroom>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Arden Allen" <gumbear@pacbell.net>
Subject: Re: Heath SWR Bridges
Date: Mon, 21 May 2007 21:03:10 -0400
MIME-Version: 1.0
Content-Type: text/plain;
     format=flowed;
     charset="iso-8859-1";
     reply-type=response
Content-Transfer-Encoding: 7bit

> I agree... it seems like a perfectly good design given the
> intended use and the target cost. Heath sold tens of
> thousands of them, then MFJ did the same.
>
> It's a HF dummy load... works fine.

Reflecting on this, I think I understand what Brian meant.
I think he meant to say at some frequency the sleeve over
the resistor would form a shorted stub and SWR would be
infinite.

That isn't quite true because the resistor represents the
center conductor of a very lossy transmission line. The
sleeve is the outer conductor. It's a very lossy line.

The only real problem is the load impedance on that line
varies with position along that length. At the input point
the load is 50 ohms, but halfway down the resistor (line
section) the load resistance is 25 ohms. 3/4 of the way down
it is 12.5 ohms. So there is some mismatch along the
transmission line formed by the resistor and the outer
sleeve.

The way to correct that would be to have a tapered line section that has zero spacing at the shorted end and 50 ohm spacing at the open end. An exponential curve in the taper so at every point the transmission line impedance matches the impedance of the remaining resistance.

Since you can't really do that without losing cooling or making it expensive Heath used the solution of a transmission line impedance of about 20-30 ohms.

When I designed a load for someone else I had the sheet metal in the sleeve punched out with slots to increase the impedance as the position moved towards the connector. That at least made the impedance move in the right direction, extending bandwidth to UHF.

As for the SWR bridges like Heath used (a sampling line in a trough), the electrical length cannot be too long in terms of wavelength or errors creep in. The sampling line itself becomes long enough to have its own SWR issues. It can't be too short or it isn't sensitive enough. Also the capacitance of the diodes loads the line and complex impedance of the resistor and the path over which it terminates the sampling lines becomes too long, as does the path through the diodes and the bypass caps on the diode outputs. It really is a very limited frequency range design, if you want any real accuracy.

Of course we probably don't notice the inaccuracy. We probably just want any inaccuracy to be in agreement with other things at a particular point. In other words if they all say about 1.2:1 or less with a 50 ohm load that would be cool, even if with a 150 ohm load they might say 2:1 or 5:1 and disagree with everything else. Almost anything can be made to appear good when the test is only a point somewhere around zero on reflected power. When voltages between forward and reflected are nearly infinite in ratio it's easy, when they are close and we are looking for small differences in two much larger voltages is where a design has to be good. The ideal thing would be to change sampling system design with frequency.

That's why we can't beat our Birds.

73 Tom

Message-Id: <7.0.1.0.2.20070521200632.02304130@muohio.edu>
Date: Mon, 21 May 2007 20:14:35 -0600
To: Old Tube Radios <boatanchors@theporch.com>
From: "James C. Garland" <4cx250b@muohio.edu>
Subject: Interesting transmission line test
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I'm working on a homebrew project where, to keep things cheap, I
wanted to use some CAT6 computer cable. CAT5 and CAT6 cable are what
are used for computer internet patch cords. They are four twisted
pairs of 24AWG solid wire. CAT6 has a data rate capacity of hundreds
of MHz, and CAT5 isn't far behind. The cable is dirt cheap and can
be bought at a Radio Shack, Lowes, Home Depot, etc.

WHen I looked up the specs on the cable, I noticed that each twisted
pair has 100 Ohm impedance. As an experiment, I paralleled two of
the twisted pairs on a fifty foot length and checked it out with my
MFJ259B antenna analyzer. The stuff had almost exactly a 50 Ohm Z,
up through the 6 meter band.

Then I hooked it up to a transmitter, with a dummy load at the end,
and started ramping up the power. It handled 100W with no discernible
heating at all. I left the tranmitter on for five minutes, but
switched it off when the transmitter heat sink started to get pretty hot.

A hundred foot length of the stuff has a loss of about 3dB at 30 MHz.
It's not like RG8 or LMR400, but could make a pretty good, cheap,
lightweight feedline for a dipole on the lower HF bands.

73,

JIm W8ZR

****
Jim Garland
Santa Fe, NM
www.w8zr.net
****

Message-ID: <000501c79c80$cce42840$6b9c1f45@rtconline.com>
From: "Ken" <n5cm@rtconline.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Johnson Junior Matchbox.
Date: Tue, 22 May 2007 07:52:19 -0700
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Fellows,

I need a schematic of the Johnson Junior Matchbox. The one I have has had
"surgery" before I got it. It is
fixed for open wire feeders. I need to put back the wiring for co-ax.
Any help appreciated!
Take care,

Ken   N5CM

Message-ID: <000a01c79c7c$de3e96b0$e9e1a243@HAL1000>
From: "B. Smith" <smithab11@comcast.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Johnson Junior Matchbox.
Date: Tue, 22 May 2007 10:24:10 -0400
MIME-Version: 1.0
Content-Type: multipart/mixed;
     boundary="----=_NextPart_000_0007_01C79C5B.564A85F0"

This is a multi-part message in MIME format.

------=_NextPart_000_0007_01C79C5B.564A85F0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Ken the schematic is available on "Bama" but I have downloaded it for you
and attached it.
73 breck k4che

From: "Ken" <n5cm@rtconline.com>

| |
| I need a schematic of the Johnson Junior Matchbox. The one I have has had
| "surgery" before I got it. It is

| fixed for open wire feeders. I need to put back the wiring for co-ax.
| Any help appreciated!
| Take care,
|
| Ken   N5CM
|

------=_NextPart_000_0007_01C79C5B.564A85F0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

* *
*   ---REMAINDER OF MESSAGE TRUNCATED---   *
*   This post contains a forbidden message format   *
* (such as an attached file, a v-card, HTML formatting)   *
*   Mail Lists at theporch.com only accept PLAIN TEXT   *
* If your postings display this message your mail program   *
* is not set to send PLAIN TEXT ONLY and needs adjusting   *
* *

------=_NextPart_000_0007_01C79C5B.564A85F0--

Mime-Version: 1.0
From: "k4pf@juno.com" <k4pf@juno.com>
Date: Tue, 22 May 2007 14:31:20 GMT
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Johnson Junior Matchbox.
Content-Transfer-Encoding: quoted-printable
Content-Disposition: inline
Content-Type: text/plain
Message-Id: <20070522.073137.15664.2951426@webmail32.lax.untd.com>

Hi, Ken

The 275W Johnson matchbox didn't come with a coax output connector.
See the pdf file at BAMA for the schematic and info
(on page two) on adding jumpers for coax output:
http://bama.edebris.com/manuals/johnson/matchbox/

73,
Ed Knobloch

-- "Ken" <n5cm@rtconline.com> wrote:
Hi Fellows,

I need a schematic of the Johnson Junior Matchbox. The one I have has ha=
d
"surgery" before I got it. It is
fixed for open wire feeders. I need to put back the wiring for co-ax.
Any help appreciated!
Take care,

Ken   N5CM

Message-Id: <200705221446.l4MEkRtw019477@mailrtr04.ntelos.net>
Date: Tue, 22 May 2007 10:46:58 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Dave or Debbie Metz <dmetz@ntelos.net>
Subject: FS R1051B
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

While not a pure BA, at 80lbs, it qualifies even with only 2
tubes. Very nice working and cosmetic condition and comes with the
shock mount and power cord. This would be for pickup only in
Staunton, Va. or I will be in the Raleigh area of NC this weekend
and could meet you in Holly Springs. If I have to box it, I will
probably list it on the bay so I would really like to have a pickup
or delivery. In advance, thanks for consideration. $350.

thanks
dave
KI4WMD

Message-ID: <21634299.1179851591999.JavaMail.root@mswamui-
chipeau.atl.sa.earthlink.net>
Date: Tue, 22 May 2007 09:33:11 -0700 (GMT-07:00)
From: Richard Dillman <ddillman@igc.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: K6KPH OTA for Night of Nights
Mime-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 7bit

Amateur station K6KPH will be on the air for this year's Night of Nights event.
Professional operators will be at the key to receive signal reports for commercial
coast stations.

Night of Nights is an annual event held on 12 July by the Maritime Radio

Historical (MRHS) Society to commemorate the history of maritime radio.

Once the maritime mobile bands were populated edge to edge with powerful coast stations operating from virtually every country on every continent. Once the ships of world trade and the great passenger liners filled the air with their radiograms - and with their calls for help when in danger on the sea. Now those bands are largely silent.

But once a year the the MRHS returns stations KPH, KSM and KFS to the air. Other stations including WLO, KLB, NMC, NOJ and, we hope for the first time this year, NMN often join us. Calls from ships at sea make the event seem like we have returned to the golden age of maritime radio.

This year, for the first time, we plan to have K6KPH on the air on several frequencies to receive signal reports from amateur stations. The operators at K6KPH will be seasoned commercial operators with years of experience "sitting the circuit". This will give us information about how well the stations are being heard and will give amateur stations the experience of what it was like to work a real coast station.

Details of Night on Nights VIII will follow, including times, frequencies and QSL information for all stations. But we wanted to get this notice out early so you can mark your calendars for this year's event.

VY 73,

Richard Dillman, Chief Operator
Maritime Radio Historical Society

Date: Tue, 22 May 2007 11:01:54 -0700
From: Richard Loken <richardlo@admin.athabascau.ca>
Subject: Re: Johnson Junior Matchbox.
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Message-id: <Pine.PMDF.4.44L.0705221058540.1084-100000@admin.athabascau.ca>
MIME-version: 1.0
Content-type: TEXT/PLAIN; charset=US-ASCII

On Tue, 22 May 2007, Ken wrote:

> I need a schematic of the Johnson Junior Matchbox. The one I have has had
> "surgery" before I got it. It is
> fixed for open wire feeders. I need to put back the wiring for co-ax.

I am going to say this and I hope fifty other people also say it. The Johnson Matchbox was never intended to work with coax. It is right when it only works with open feeders.

Now I have that out of the way, you want to ask how to hack your matchbox
so it will work with coax as most of them have been.

--
   Richard Loken VE6BSV, Systems Programmer - VMS : "Anybody can be a father
   Athabasca University   : but you have to earn
   Athabasca, Alberta Canada   : the title of 'daddy'"
   ** richardlo@admin.athabascau.ca **   : - Lynn Johnston

Message-ID: <004701c79ca4$3631c730$88a0480c@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Johnson Junior Matchbox.
Date: Tue, 22 May 2007 11:52:18 -0700
MIME-Version: 1.0
Content-Type: text/plain;
     charset="Windows-1252"
Content-Transfer-Encoding: 7bit

> The 275W Johnson matchbox didn't come with a coax output connector.

Yes, but many have had an SO-239 added!

Arden Allen
KB6NAX

Message-ID: <004801c79ca4$37c9cc50$88a0480c@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Old Tube Radios" <boatanchors@theporch.com>
Subject: Re: Johnson Junior Matchbox.
Date: Tue, 22 May 2007 12:05:39 -0700
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> I am going to say this and I hope fifty other people also say it. The
> Johnson Matchbox was never intended to work with coax. It is right when
> it only works with open feeders.

Correcto. It was designed to be used with a limited number of dipole type
antennas. Johnson had their own recommended dipole design. BUT, such a
situation never stopped a true ham from using the MatchBox creatively. Mine
has a coax output and a five position input link tap changing switch. I can

load up just about anything with it. Not the most efficient way to match antennas of unknown impedance but it's what works that get us on the air.

Please don't ask me to define "works." ;-)

Arden Allen
KB6NAX

Date: Tue, 22 May 2007 15:04:28 -0500 (CDT)
From: Bob Roehrig <broehrig@aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Johnson Junior Matchbox.
Message-ID: <Pine.LNX.4.61.0705221503330.3553@hermes.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII; format=flowed

On Tue, 22 May 2007, Arden Allen wrote:

> It was designed to be used with a limited number of dipole type
> antennas.

A friend of mine used a backwards 4:1 balun on the output of his matchbox to feed coaxial antennas.

Bob Roehrig
Aurora University Telecom dept.
broehrig@aurora.edu
K9EUI W9ZGP WD2XSH/19
630-844-4898 fax 630-844-4222
"Nostalgia is a thing of the past"

Message-ID: <46535173.4080203@aggienetwork.com>
Date: Tue, 22 May 2007 15:24:19 -0500
From: Niel Wiegand <nielwiegand@aggienetwork.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: n5cm@rtconline.com
Subject: Re: Johnson Junior Matchbox.
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Check the Matchbox manual on bama at http://bama.sbc.edu/johnson.htm It states "The Matchbox is capable of matching the 52 ohm output of a

transmitter into loads ranging from [balanced line specs snipped out here] 50 to 2000 ohms for unbalanced lines." The schematic also shows an output" "Single Wire Terminal".

Connect your coax fed antenna between the single wire terminal and ground.

73,
Niel - W0VLZ

Arden Allen wrote:

>>I am going to say this and I hope fifty other people also say it. The
>>Johnson Matchbox was never intended to work with coax. It is right when
>>it only works with open feeders.
>
>
>

Message-ID: <004201c79cc3$3b6ddd00$e9e1a243@HAL1000>
From: "B. Smith" <smithab11@comcast.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Johnson Junior Matchbox.
Date: Tue, 22 May 2007 18:47:52 -0400
MIME-Version: 1.0
Content-Type: text/plain;
    charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Adding a coax connector and using it on the Matchbox is fine and gives you a fairly low loss tuner and makes your system more versatile. However using a "voltage balun" on the output to convert to 50 ohms is not a good idea due to the additional loses.

As far as SWR . . . my personal goal on any HF system is usually just get it below 5 or so and tune the complete system, When checking an antenna system I often just use a watt meter and never compute the actual Standing Wave Ratio but make an attempt to obtain minimum reflected power. When tuning I usually use maximum current in the line on the antenna side of the tuner as my indication for a match while monitoring a remote Field Strength meter, checking for max current vs max field strength and forget about everything else especially SWR.

Worrying about an SWR of 3:1 is really a waste of time as the resulting feed line loses at HF frequencies is very low. See any handbook for graphs and explanations.

Breck k4che
ex kn4che
Dover, Delaware. Ann't nutten in Dover except a NASCAR track, chickens, and hams that can't solder.

|

Message-ID: <001201c79cd7$d83c9860$6b9c1f45@rtconline.com>
From: "Ken" <n5cm@rtconline.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Many thanks!!
Date: Tue, 22 May 2007 16:39:05 -0700
MIME-Version: 1.0
Content-Type: text/plain;
    charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Fellows,

Many thanks for all the replies! Must have gotten about 15! Good information which I appreciate!
This unit has been altered and has four UHF connectors on the back panel, three having been
put on by a "do-it-yourselfer" but only one connected to the link on the coil. One replied that
a friend had used a 4 to 1 balun backwards at the input. I'll try that first. Another quoted a
statement from the data that it will match 52 ohms using the single wire feed connection and gnd.

Now that I have seen the schematic I can see that it is designed to work into a balanced feedline!
"Live & Learn" & "Never too old to learn"!
Grateful & take care fellows,

Ken N5CM

Message-ID: <46537983.5000906@cox.net>
Date: Tue, 22 May 2007 16:15:15 -0700
From: David Hollander <n7rk@cox.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>

Subject: AN/PRM-1A Radio Test Set
Content-Type: text/plain; charset=ISO-8859-1; format=flowed
Content-Transfer-Encoding: 7bit

Found an AN/PRM-1A Radio Test Set at a hamfest a few weeks ago. The case is pretty scuffed up but after looking a the insides, it looks to be a brand new unit that was never used. The unit even has the cardboard battery tag still attached to the front panel and the battery terminals look like they have never seen batteries. It says it is a field strength meter but it is actually a 7 band receiver covering 150 kHz to 25 MHz using 1 and 3 volt tubes. Looks kind of similar to the AN/GRR-5.

Is anybody familiar with this radio. Anyone have a digital copy of the manual or a diagram for hooking this up for ac operation?

Tnx es 73,

Dave N7RK
--
****
Dave N7RK   Boatanchors Home Page: http://members.cox.net/n7rk
Phoenix, Arizona   *DXCC Honor Roll*   *WAZ#22 - 75 Meter SSB*

ex-XE2/N7RK, N7RK/ZB2, VK2ERK, ZM0AJN, WB6NRK, WN6IWX

Boatanchor and Antique Radio Collector

Date: Tue, 22 May 2007 19:24:52 -0500 (CDT)
From: Bob Roehrig <broehrig@aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Johnson Junior Matchbox.
Message-ID: <Pine.LNX.4.61.0705221921460.19430@hermes.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII; format=flowed

On Tue, 22 May 2007, B. Smith wrote:

> Worrying about an SWR of 3:1 is really a waste of time as the resulting feed
> line loses at HF frequencies is very low. See any handbook for graphs and
> explanations.

For the most part I agree. When I am adjusting my tuner(s) for a match, I don't care about the actual SWR - I just adjust for minimum. In the case of my 4 band half sloper, the minimum (without tuner) on 75 meters is 3:1. But when you consider the loss, who cares? The tuner just makes the rig happy. Most of today's (GASP - solid state) rigs are not happy with 2:1 or

maybe even beging reducing output at SWR's greater than 1.5.

Bob Roehrig
Aurora University Telecom dept.
broehrig@aurora.edu
K9EUI W9ZGP WD2XSH/19
630-844-4898 fax 630-844-4222
"Nostalgia is a thing of the past"

Message-ID: <002601c79cd4$022557b0$a3a0cdd1@gateway>
From: "Sandy" <ebjr@i-55.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: AN/PRM-1A Radio Test Set
Date: Tue, 22 May 2007 19:47:56 -0500
MIME-Version: 1.0
Content-Type: text/plain;
format=flowed;
charset="iso-8859-1";
reply-type=response
Content-Transfer-Encoding: 7bit

The AN/PRM-1 is just not "another receiver". It and the accessories (which you may or may not have) comprise a complete field strength meter capable of measuring field strengths in microvolts per meter. It originally came in a couple of trunk like cases. One contained the receiver and the other contained the power supply and other cables and accessories. The receiver is capable of being powered with internal batteries or the external AC supply. Usually the main test loop and whip antenna are contained in the lid of the receiver itself. There should be a band by band correction chart book included inside the lid as well as I remember.
It can be used for finding power line interference by surveying the noise intensity in a number of locations, then plotted on a map which will give you a pretty good idea of where the noise is coming from. There was a very small loop that could be used to find noises coming down cables or runninng down noise sources very close up. (Like whines and interference in an auto harness or under the hood etc.
The only problem with it, is that it is quite bulky. Modern sets (I think still made by Stoddart) are much smaller and lighter.
Hope this helps. I'm only working from memory so I may have omitted details.

73,
Sandy W5TVW
----- Original Message -----
From: "David Hollander" <n7rk@cox.net>

To: "Old Tube Radios" <boatanchors@theporch.com>
Sent: Tuesday, May 22, 2007 6:15 PM
Subject: AN/PRM-1A Radio Test Set

> Found an AN/PRM-1A Radio Test Set at a hamfest a few weeks ago. The case
> is pretty scuffed up but after looking a the insides, it looks to be a
> brand new unit that was never used. The unit even has the cardboard
> battery tag still attached to the front panel and the battery terminals
> look like they have never seen batteries. It says it is a field strength
> meter but it is actually a 7 band receiver covering 150 kHz to 25 MHz
> using 1 and 3 volt tubes. Looks kind of similar to the AN/GRR-5.
>
> Is anybody familiar with this radio. Anyone have a digital copy of the
> manual or a diagram for hooking this up for ac operation?
>
> Tnx es 73,
>
> Dave N7RK
> --
> **
> Dave N7RK   Boatanchors Home Page: http://members.cox.net/n7rk
> Phoenix, Arizona   *DXCC Honor Roll*   *WAZ#22 - 75 Meter SSB*
>
> ex-XE2/N7RK, N7RK/ZB2, VK2ERK, ZM0AJN, WB6NRK, WN6IWX
>
> Boatanchor and Antique Radio Collector
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG Free Edition. Version: 7.5.467 / Virus Database:
> 269.7.6/814 - Release Date: 5/21/2007 2:01 PM
>
>

End of BOATANCHORS Digest 4054
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